

REMARKS

The specification has been amended to update a reference to a previously filed patent application with the number of the corresponding issued patent.

Claims 1, 3-4, 7-12 and 14 were rejected under 35 U.S.C. §103(a) as being unpatentable over US Pat. 5,924,988 (Burris et al.) in view of JP appl. 05-015529 (Matsushita Electric). Claim 1 has been amended to incorporate the subject matter of Claims 2 and 5, which have been canceled. Amended Claim 1 describes an ultrasonic diagnostic imaging system comprising a main body housing imaging electronics and a control panel coupled to the imaging electronics; a flat panel display electrically coupled to the imaging electronics; a wheeled cart on which is mounted the main body and the flat panel display with the control panel on the front, the wheeled cart being adapted so that the cart can travel in the front direction; and an articulating arm assembly to which the flat panel display is connected for adjusting the elevation and lateral position of the flat panel display with respect to the main body, the articulating arm assembly including a first arm movably mounted to the main body and a second arm movably connected to the first arm and to the flat panel display, wherein at least one of the arms includes a 4-bar linkage containing a piston inside the linkage; and an inter-arm locking mechanism, located on the first and second arms, which is adapted to lock the two arms together in a stowed position when the two arms are lowered in line with the direction of travel. Burris et al. show a flat panel display mounted on an ultrasound system with different articulation mechanisms, but give no consideration to the problem of tilting the display when it is raised or lowered. Consequently there is no suggestion of a using a 4-bar linkage for one of the arms as recited in amended Claim 1, which acts to maintain the orientation of the display of an embodiment of the present invention when the display is raised or lowered. Burris et al. emphasize how much lighter a flat panel display is than a CRT monitor, which is why they provide articulating mechanisms. But Burris et al. fail to realize that additional support is needed to neutralize the weight of even a flat panel display, which is why Claim 1 recites the inclusion of a piston inside the 4-bar linkage. Furthermore, Burris et al. give no consideration to any inter-arm locking mechanism as recited in amended Claim 1. The Examiner refers to a hinge 550 as being a locking mechanism, but there is no suggestion of any locking capability of the hinge in Burris et al.

The Matsushita Electric application describes a monitor which can be raised and lowered with a 4-bar linkage arm. Unlike the claimed invention, there is only a single arm,

not two. The Matsushita Electric application has a piston outside the 4-bar linkage, not inside the linkage as recited in amended Claim 1. As previously mentioned, Burris et al. have no piston anywhere. The Matsushita Electric application has no locking mechanism. For all of these reasons it is respectfully submitted that amended Claim 1 is patentable over Burris et al. and the Matsushita Electric application. It is respectfully submitted that dependent Claims 3-4, 7-12 and 14 are patentable over these two references by reason of their dependency from Claim 1.

Claims 6 and 13 were rejected under 35 U.S.C. §103(a) as being unpatentable over Burris et al. and the Matsushita Electric application and further in view of US Pat. 6,669,639 (Miller et al.) Miller et al. describe an articulating mechanism for a CRT monitor, which has no ability to raise or lower the monitor. Reference is made to the lock release described in col. 3, lines 24-64 which releases a lock at the pivot point where the two arms in Miller et al. are joined together. Amended Claim 1 recites that the locking mechanism is adapted to lock the two arms together when the two arms are lowered in line with the direction of travel. The arms in Miller et al. are fixed and cannot be lowered and cannot be locked together because they cannot be brought together. The lock of Miller et al. only locks the rotation of the arms about a vertical axis; it has no ability to lock arms which move up and down because there is no such motion by the Miller et al. mechanism. Consequently it is respectfully submitted that the combination of Burris et al. and Miller et al. and the Matsushita Electric application cannot render Claim 1 or amended Claim 1 unpatentable.

Claim 13 recites that the first arm, which is attached to the main body of the ultrasound system, has a fixed inclination and the second arm includes a 4-bar linkage. This arm arrangement is not found in any of the three references. Burris et al. has no arm with a fixed inclination and no 4-bar linkage. The Matsushita Electric application shows a single arm with a 4-bar linkage. Miller et al. has two arms with fixed inclination and no 4-bar linkage. Claim 13 also depends from Claim 1, which recites the use of a piston in a 4-bar linkage which is not found in any of the references, and a mechanism for locking the two arms together when lowered to a stowed position which is also not found in the combination of references. For all of these reasons it is respectfully submitted that Claim 13 is patentable over Burris et al. and Miller et al. and the Matsushita Electric application.

In view of the foregoing amendments and remarks, it is respectfully submitted that Claims 1, 3-4, and 6-14 are patentable over the combination of Burris et al. and Miller et al. and the Matsushita Electric application. Accordingly it is respectfully requested that the rejection of these claims under 35 U.S.C. §103(a) be withdrawn.

In light of the foregoing amendment and remarks, it is respectfully submitted that this application is now in condition for allowance. Favorable reconsideration is respectfully requested.

Respectfully submitted,

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